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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,426	08/13/2001	Stephen F. Gass	SDT 301	9667

27630 7590 05/01/2006

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EXAMINER

PRONE, JASON D

ART UNIT PAPER NUMBER

3724

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,426

Applicant(s)

GASS ET AL.

Examiner

Jason Prone

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/26/06 2/16/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda (4,117,752) in view of Hughes et al. (5,081,406).

In regards to claim 1, Yoneda discloses the invention including a conductive cutter adapted to cut a work piece (Fig. 1), a motor adapted to drive the cutter (10), a contact detection system electrically coupled to the cutter to impart an electrical signal, with at least one property, thereto (16), the at least one property is changed when a person contacts the cutter (Column 3 lines 14-26), a reaction system adapted to cause a predetermined action to take place upon detection of contact between the person and the cutter by the contact detection system (20).

In regards to claim 2, Yoneda discloses the at least one property is voltage amplitude of the electric signal (Fig. 5).

In regards to claims 4 and 5, Yoneda discloses where the time during which the change in the at least one property occurs is less than one hundred microseconds/one millisecond (Column 3 lines 27-42, this paragraph states that the "band blade immediately stops without causing injuries to the human body". "Immediately" qualifies as a time frame less than the claims ranges.).

In regards to claim 7, Yoneda discloses the predetermined action includes stopping movement of the cutter (20).

Yoneda only teaches that the blade is stopped when contacted by a human body, however, Yoneda remains silent in respect to the contact detection system is adapted to distinguish contact between the cutter and the person from at least one other event generating a comparable amount of change in the at least one property based on the time during which the change in the at least one property occurs. Hughes et al. teaches a contact detection system that is adapted to distinguish contact between the cutter and the person from at least one other event generating a comparable amount of change in the at least one property based on the time during which the change in the at least one property occurs (Table A). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Yoneda with a contact detection system capable of distinguishing between different work pieces and the human body, as taught by Hughes et al., to allow the saw to determine if the material contacting the blade is to be cut or not.

3. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda in view of Hughes et al. as applied to claim 1 above, and further in view of Reddi (6,366,099). Yoneda and Hughes et al. disclose the invention but fails to disclose the one other event is contact between a cutter and green wood. Reddi teaches capacitance-measuring circuits are used for detecting a human hand (column 3, line 15) as well as for detecting the moisture content of wood (column 3, line 23). Therefore, it would have been obvious to one skilled in the art, at the time of the invention, to have

provided Yoneda in view of Hughes et al. with the additional ability of distinguishing between cutter/human contact and cutter/green wood contact, as taught by Reddi, to allow the saw to recognize additional materials that the blade should not be stopped when the blade makes contact with.

Allowable Subject Matter

4. Claim 3 is allowed.

Response to Arguments

5. Applicant's arguments filed 16 February 2006 have been fully considered but they are not persuasive. The Yoneda reference incorporates all of the claimed structure, however, it is silent with respect to a "distinguishing characteristic" of the detection system. Wood in some cases does not have a comparable amount of charge as a human body part. One skilled in the art would assume that the detection system of Yoneda is not limited to distinguishing between human and wood only but to assume the Yoneda reference can distinguish between other items would be speculation. The Hughes reference teaches that it is old and well known in the art of saw safety for the detection system to distinguish between the user's hand and numerous items that the saw could cut. Hughes et al. is not modifying the structure of Yoneda's detection system. Hughes is only teaching that it is old and well known for the detection system of Yoneda to distinguish between the user's hand and items other than wood.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

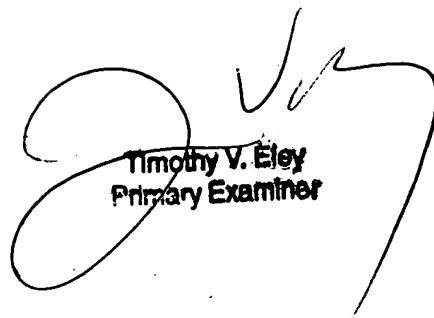
Application/Control Number: 09/929,426

Page 6

Art Unit: 3724

JP

April 19, 2006

A handwritten signature, possibly reading "JP", is written in black ink.A large, stylized handwritten signature in black ink, likely belonging to Timothy V. Eley.

Timothy V. Eley
Primary Examiner